

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT(S):	Frank J. Viola	EXAMINER:	Julian W. Woo
SERIAL NO.:	10/510,165	ART UNIT:	3773
FILED:	October 1, 2004	DATED:	June 3, 2010
TITLE:	<b>SURGICAL CLIP APPLIER WITH HIGH TORQUE JAWS</b>		

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Va. 22313-1450

*Filed Via EFS-Web*  
Confirmation No.: 6649

**BRIEF ON APPEAL**

Sir:

This is an appeal from a Final Office Action mailed on December 31, 2009 and an Advisory Action mailed on March 24, 2010 in the above-identified application. This Brief is accompanied by the requisite fees set forth in 37 C.F.R. §41.20 (b)(2).

**I. REAL PARTY IN INTEREST**

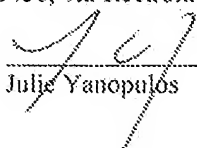
The real party in interest for this application is Tyco Healthcare Group LP (d/b/a Covidien), having a principal office at 60 Middletown Avenue, North Haven, CT 06473.

---

**CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. §1.8(a)**

I hereby certify that this correspondence is being transmitted on the date below with the United States Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450, via electronic submission.

Dated: June 3, 2010

  
\_\_\_\_\_  
Julie Yanopoulos

## **II. RELATED APPEALS AND INTERFERENCES**

Appellants' legal representative and/or the assignee of Appellants' interest in the above-identified application are not aware of any related appeals, interferences or judicial proceedings which may be related to, directly affect, or be directly affected by or have a bearing on any decision by the Board of Patent Appeals and Interferences in this appeal.

## **III. STATUS OF CLAIMS**

The status of the claims of this application is as follows:

- A) Claims 31-64 are pending;
- B) Claims 31-64 stand finally rejected and are being appealed; and
- C) Claims 1-30 have been cancelled.

An accurate copy of Claims 31-64 is provided in the Claims Appendix.

## **IV. STATUS OF AMENDMENTS**

The Advisory Action mailed March 24, 2010 indicates that the Response to the Final Office Action of December 31, 2009, filed on March 1, 2010 (referred to in the Advisory Action under "Request for Reconsideration/Other") has been considered but failed to place the application in condition for allowance.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Independent claim 31 is directed to a surgical clip applying apparatus 10 (Specification, page 10, lines 11-13, and FIG. 1). The surgical clip applying apparatus includes a handle portion 12 including a moveable handle 14 and a stationary hand grip 16 (Specification, page 10, lines 13-15, and FIG. 1); an elongated body portion 18 extending from the handle portion 12 (Specification, page 10, lines 13-16, and FIG. 1); and a jaw blade 100 extending from said elongated body portion and operably connected to the handle portion 12 for selective closure upon an actuation of the moveable handle 14 (Specification, page 11, lines 21-23, and FIGS. 1 and 3-9).

The jaw blade 100 comprises a first leg 102A and a second leg 102B each leg having a jaw 104A, 104B integrally connected thereto and extending distally therefrom (Specification, page 11, lines 23-27, and FIGS. 1 and 3-9), each jaw 104A, 104B defining a channel oriented substantially along a respective longitudinal axis thereof (See FIGS. 3-9), wherein the channels are configured to receive a surgical clip therebetween (Specification, page 11, lines 25-27), wherein each jaw is oriented at an angle (See FIGS. 3, 3A, 4, 6, 8 and 9) with respect to a plane defined by the first 102A and second leg 102B.

The jaw blade 100 comprises an inter-leg engaging member 108A, 108B, extending from each of the first 102A and second legs 102B and including a distal end 110A, 110B engageable with the other of the first 102A and second legs 102B, wherein the distal end 110A, 110B of each inter-leg engaging member 108A, 108B is at all times at least partially engaged with the

other of the first 102A and second legs 102B (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9).

Independent claim 45 is directed to a surgical clip applying apparatus 10 (Specification, page 10, lines 11-13, and FIG. 1). The surgical clip applying apparatus includes a handle portion 12 including a moveable handle 14 (Specification, page 10, lines 13-15, and FIG. 1); an elongated body portion 18 removably mounted to and extending from the handle portion 12 (Specification, page 10, lines 13-16, and FIG. 1); and a jaw blade 100, 200 for use in a surgical clip applicator 10, wherein the jaw blade 100, 200 is selectively closed upon an actuation of the moveable handle 14 (Specification, page 11, lines 21-23, and FIGS. 1 and 3-9).

The jaw blade 100, 200 comprises a first leg 102A, 202A and a second leg 102B, 202B each leg having a jaw 104A, 104B, 204A, 204B integrally connected thereto and extending distally therefrom (Specification, page 11, lines 23-27; page 13, lines 27-31, and FIGS. 1 and 3-9), each jaw 104A, 104B, 204A, 204B defining a channel oriented substantially along a respective longitudinal axis thereof (See FIGS. 3-9), wherein the channels are configured to receive a surgical clip therefrom (Specification, page 11, lines 25-27).

The jaw blade 100, 200 comprises at least one inter-leg engaging member 108A, 108B, 208 extending from one of the first 102A, 202A and second legs 102B, 202B, and extending between and engaged with the other of the first 102A, 202A and second legs 102B, 202B (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9).

Independent claim 52 is directed to an apparatus 10 for applying surgical fasteners or clips (not shown, incorporated by reference at page 10, lines 18-21). The apparatus 10 comprises

a handle portion 12 including a moveable handle 14 (Specification, page 10, lines 13-15, and FIG. 1); a body portion 18 extending from the handle portion 12 (Specification, page 10, lines 13-16, and FIG. 1) and including a rotating collar 22 for rotating the body portion 18 relative to the handle portion 12 (Specification, page 10, lines 16-18, and FIG. 1).

The apparatus 10 comprises a jaw blade 100, 200 extending from the body portion 18 at an end opposite the handle portion 12 and being selectively closed upon an actuation of the moveable handle 14 (Specification, page 11, lines 21-23; page 13, lines 25-27, and FIGS. 1 and 3-9), the jaw blade 100, 200 having a first leg 102A, 202A and a second leg 102B, 202B, each leg having a jaw 104A, 104B, 204A, 204B integrally connected thereto (Specification, page 11, lines 23-27; page 13, lines 27-31, and FIGS. 1 and 3-9), each jaw 104A, 104B, 204A, 204B defining a channel oriented substantially along a respective longitudinal axis thereof (See FIGS. 3-9), wherein the channels are configured to receive a fastener or clip (Specification, page 11, lines 25-27), the jaw blade 100, 200 being movable between an open position for receiving the fastener or clip and a closed position for forming the fastener or clip in response to a movement of the handle portion (as incorporated by reference at page 10, lines 18-21).

The apparatus 10 comprises a fastener or clip supply disposed within the body portion 18 (as incorporated by reference at page 10, lines 18-21).

The jaw blade 100, 200 further includes at least one inter-leg engaging member 108A, 108B, 208 extending between and being adapted to effect an engagement between the first 102A, 202A and second legs 102B, 202B (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9), wherein vertical displacement in a first direction of one of the first 102A, 202A and

second legs 102B, 202B causes a corresponding displacement in the first direction of the other of the first 102A, 202A and second legs 102B, 202B, and wherein a vertical displacement in a second direction, opposite the first direction, of one of the first 102A, 202A and second legs 102B, 202B causes a second corresponding displacement in the second direction of the other of the first 102A, 202A and second legs 102B, 202B, wherein the jaws 100, 200 are configured to form a surgical clip (not shown) disposed therebetween (Specification, page 12, line 19 to page 13, line 13, and FIGS. 3, 4, 6, 8 and 9).

Independent claim 55 is directed to a method for applying surgical clips and performing blunt dissection of tissue, comprising the steps of providing a surgical clip applier 10 for applying surgical clips (Specification, page 10, lines 11-13, and FIG. 1). The surgical clip applier 10 includes a handle portion 12 including a moveable handle 14 (Specification, page 10, lines 13-15, and FIG. 1); an elongated body portion 18 rotatably mounted to and extending from the handle portion 12 (Specification, page 10, lines 13-16, and FIG. 1); and a jaw blade 100, 200 supported on a distal end of the elongated body 18 and being selectively closed upon an actuation of the moveable handle 14 (Specification, page 11, lines 21-23; page 13, lines 25-27, and FIGS. 1 and 3-9).

The jaw blade 100, 200 includes a first leg 102A, 202A and a second leg 202A, 202B, each of the first 102A, 202A and second legs 102B, 202B having a jaw 104A, 104B, 204A, 204B integrally connected thereto and extending distally therefrom (Specification, page 11, lines 23-27; page 13, lines 27-31, and FIGS. 1 and 3-9), each jaw 104A, 104B, 204A, 204B defining a channel oriented substantially along a respective longitudinal axis thereof (See FIGS. 3-9),

wherein the channels are configured to receive the surgical clip therebetween (Specification, page 11, lines 25-27). The jaw blade 100, 200 includes at least one inter-leg engaging member 108A, 108B, 208 extending between and effecting an engagement between the first 102A, 202A and second legs 102B, 202B (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9), such that a vertical displacement in a first direction of one of the first 102A, 202A and second legs 102B, 202B causes a first corresponding displacement in the first direction of the other of the first 102A, 202A and second legs 102B, 202B, and such that a vertical displacement in a second direction, opposite the first direction, of one of the first 102A, 202A and second legs 102B, 202B causes a second corresponding displacement in the second direction of the other of the first 102A, 202A and second legs 102B, 202B (Specification, page 12, line 19 to page 13, line 13, and FIGS. 3, 4, 6, 8 and 9).

The method further comprises the steps of performing a blunt dissection technique utilizing the jaws 100, 200 of the clip applier 10 (Specification, page 8, line 13); and applying a surgical clip to a tissue or vascular target area utilizing the clip applier 10 (Specification, page 8, lines 17-19).

Independent claim 56 is directed to a surgical clip applier 10 comprising a handle portion 12 including a movable handle 14 (Specification, page 10, lines 13-15, and FIG. 1); an elongated body portion 18 extending from the handle portion 12 and including a rotating collar 22 for rotating the body portion 18 relative to the handle portion 14 (Specification, page 10, lines 16-18, and FIG. 1); and a jaw blade 100, 200 supported on a distal end of the elongated body 18 and

being selectively closed upon an actuation of the moveable handle 14 (Specification, page 11, lines 21-23; page 13, lines 25-27, and FIGS. 1 and 3-9).

The jaw blade 100, 200 comprises a first leg 102A, 202A; a second leg 102B, 202B spaced from and parallel to the first leg 102A, 202A, the first 102A, 202A and second legs 102B, 202B defining a plane (See FIGS. 2-9), each leg including a jaw 104A, 104B, 204A, 204B integrally formed at a distal end thereof and extending distally therefrom, each jaw 104A, 104B, 204A, 204B defining a channel oriented substantially along a respective longitudinal axis thereof (See FIGS. 3-9), wherein the channels are configured to receive a surgical clip therebetween (Specification, page 11, lines 25-27); and at least one inter-leg engaging member 108A, 108B, 208 extending between the first 102A, 202A and the second legs 102B, 202B and operatively engaged therewith (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9), wherein the at least one inter-leg engaging member 108A, 108B, 208 maintains or reduces the loss of co-planarity of the first leg with respect to the second leg.

The jaw blade 100, 200 includes at least one inter-leg engaging member 108A, 108B, 208 extending between and effecting an engagement between the first 102A, 202A and second legs 102B, 202B (Specification, page 11, line 28 to page 12, line 7, and FIGS. 1 and 3-9), such that a vertical displacement in a first direction of one of the first 102A, 202A and second legs 102B, 202B causes a first corresponding displacement in the first direction of the other of the first 102A, 202A and second legs 102B, 202B, and such that a vertical displacement in a second direction, opposite the first direction, of one of the first 102A, 202A and second legs 102B, 202B causes a second corresponding displacement in the second direction of the other of the first



102A, 202A and second legs 102B, 202B (Specification, page 12, line 19 to page 13, line 13, and FIGS. 3, 4, 6, 8 and 9).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Appellants request review of the following outstanding grounds of rejection:

A) The rejection of Claims 31-37, 41, 43 and 44 under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,653,389 to Shannon (hereinafter, "Shannon") in view of U.S. Patent No. 3,363,628 to Wood (hereinafter, "Wood"), and further in view of U.S. Patent No. 4,452,106 to Tartaglia (hereinafter, "Tartaglia");

B) The rejection of Claims 45-50, 52 and 56-59 under 35 U.S.C. 103(a), as being obvious over Shannon in view of U.S. Patent No. 6,066,174 to Farris (hereinafter, "Farris") and further in view of Wood;

C) The rejection of Claims 31, 38 and 42 under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,140,715 to Whitton, Jr. et al. (hereinafter, "Whitton, Jr.") in view of Wood and further in view of Tartaglia;

D) The rejection of Claims 31, 33, 39 and 40 under 35 U.S.C. § 103(a), as being obvious over U.S. Patent No. 4,318,313 to Tartaglia (hereinafter, "Tartaglia") in view of Wood;

E) The rejection of Claims 45, 47, 51, 56, 57 and 60 under 35 U.S.C. 103(a), as being unpatentable over Whitton, Jr. in view of Farris, and further in view of Wood;

F) The rejection of Claims 52-54 under 35 U.S.C. § 103(a) as being unpatentable over Tartaglia in view of Farris and further in view of Wood;

G) The rejection of Claim 55 under 35 U.S.C. § 103(a) as being unpatentable over Wood in view of Shannon and further in view of Farris;

H) The rejection of Claims 61, 62 and 64 under 35 U.S.C. § 103(a) as being unpatentable over Shannon in view of Farris and Wood, and further in view of U.S. Patent No. 6,319,257 to Carignan et al. ("Carignan"); and

I) The rejection of Claim 63 under 35 U.S.C. § 103(a) as being unpatentable over Wood in view of Shannon and Farris, and further in view of Carignan.

## **VII. ARGUMENTS**

**A) Claims 31-37, 41, 43 and 44 are patentable under 35 U.S.C. 103(a) over U.S. Patent No. 3,653,389 to Shannon in view of U.S. Patent No. 3,363,628 to Wood, and further in view of U.S. Patent No. 4,452,106 to Tartaglia**

Claims 31-37, 41, 43 and 44 stand rejected under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,653,389 to Shannon (hereinafter, "Shannon") in view of U.S. Patent No. 3,363,628 to Wood (hereinafter, "Wood"), and further in view of U.S. Patent No. 4,452,106 to Tartaglia (hereinafter, "Tartaglia").

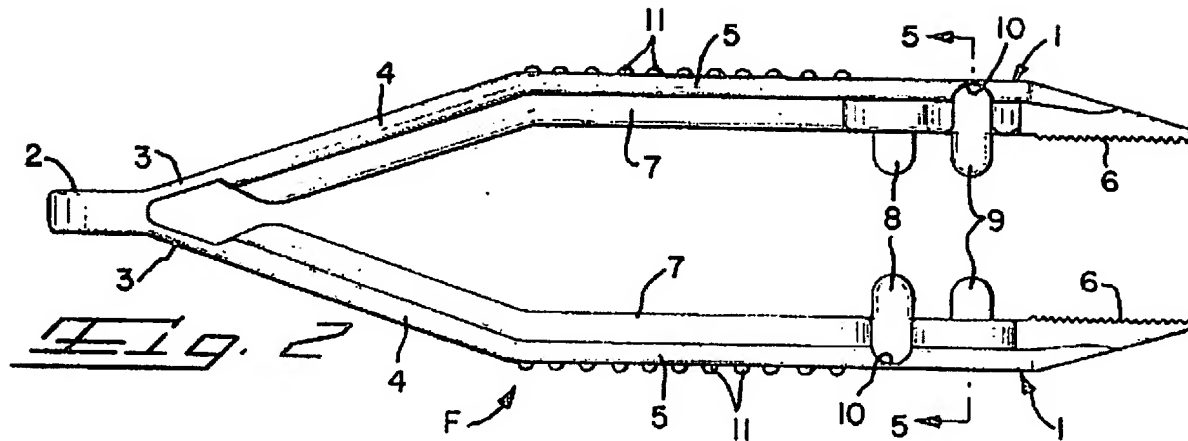
Appellants respectfully submit that that independent claim 31 is patentable over Shannon in view of Wood and further in view of Tartaglia because the claimed subject matter is not

obvious over the subject matter of Shannon, Wood and Tartaglia, taken in any proper combination with one another.

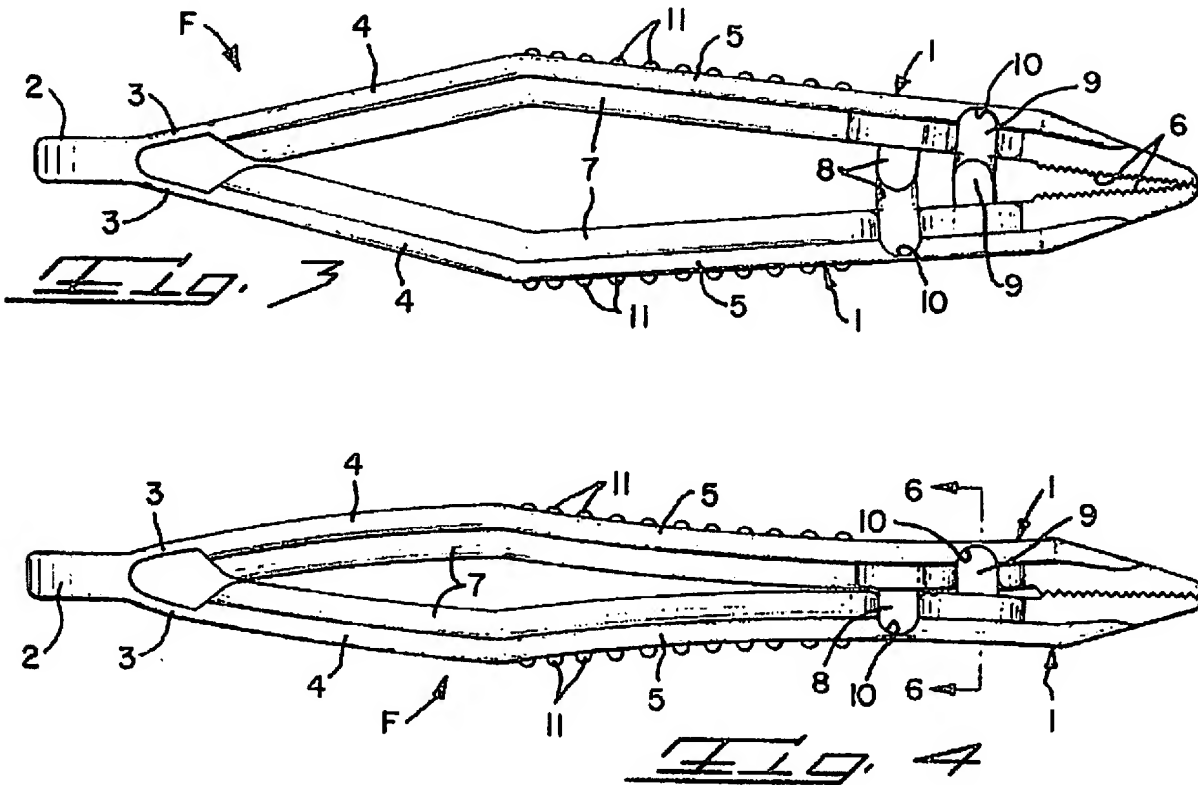
According to § 2143.03 of the MPEP, in order “to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” The Examiner has failed to show how the prior art, namely Shannon, Wood and Tartaglia, teaches or suggests all of the limitations of Appellant’s Claim 1.

Claim 31 recites a surgical clip applying apparatus including, *inter alia*, a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle.

According to the Examiner, Shannon discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to the figure reproduced below, the Examiner states that Shannon discloses a surgical apparatus including a handle portion (2 and 3 combined) including a moveable handle (3) and a stationary hand grip (2), an elongated body portion (4) and a jaw blade (5 and 6 combined) including a first leg (5) and a second leg (5), each leg having a jaw (at 6) integrally connected thereto. The Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. The Examiner relies on Tartaglia to teach inter-leg engaging members of an apparatus that are at all times at least partially engaged with each other.



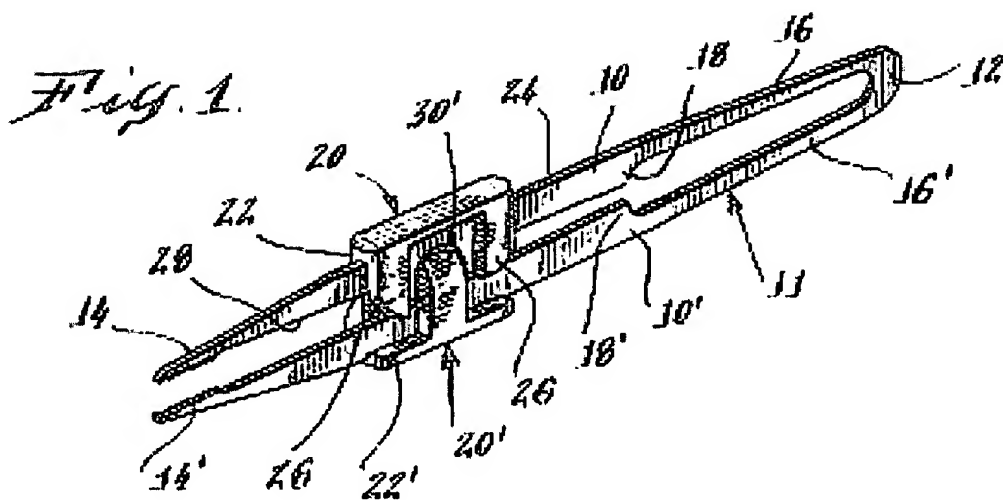
Instead, with reference to FIG. 2 above, Shannon discloses disposable forceps “F” including arms 1 which are connected together at inner ends by a connecting section 2. Each arm 1 is provided with a hinge section 3, an inclined section 4, a straight section 5 and article engaging teeth 6. Ribs 11 are disposed along the outer surfaces of straight sections 5 to provide engaging areas for an operator to normally engage the forceps between the thumb and forefinger of an operator. Contrary to the Examiner’s assertion, connecting section 2 and hinge section 3 do not form a handle portion having a moveable handle and a stationary hand grip, as neither moveable handle nor stationary hand grip are configured nor intended for engagement by a user. Furthermore, actuation of hinge section 3 does not effect the closure of engaging teeth 6. Instead, as seen in FIG. 3, below, actuation of hinge section 3 would merely force inclined sections 4 of arms 1 to engage one another. While this action may cause the tip of arms 1 to engage, engagement of teeth 6 occurs only upon application of a normal force to straight sections 5, thereby causing arms 1 to flex, as seen in FIG. 4, below. Thus, Shannon does not disclose a handle portion including a movable handle and a stationary hand grip, as recited in independent claim 31.



Appellant respectfully submits that Wood fails to cure the deficiencies of Shannon in that Wood also fails to show, teach or disclose “a handle portion including a moveable handle and a stationary hand grip,” as recited in independent claim 31. Rather, Wood merely discloses or shows a pair of jaws 19 and a clip 25 formable by the pair of jaws 19.

Appellant respectfully submits that Tartaglia fails to cure the deficiencies of Shannon and Wood in that Tartaglia also fails to show, teach or disclose “a handle portion including a moveable handle and a stationary hand grip,” as recited in independent claim 31. Rather, with reference to FIG. 1 of Tartaglia reproduced below, Tartaglia discloses forceps including a pair of elongated arms 10, 10’ connected by an end section 12 and forming an elongated U-shaped

tweezer-like spring element 11. Free ends or tips 14, 14' include teeth for securely grasping an object when arms 10, 10' are flexed toward each other to engage tips 14, 14'. To facilitate manipulation, forceps of Tartaglia include finger pieces 20, 20' mounted on mid-portions 18, 18' of arms 10, 10'. Neither end section 12 nor either of tips 14, 14' or sections 16, 16' of arms 10, 10', respectively, form a handle portion having a moveable handle and a stationary hand grip, as neither end section 12, tips 14 or sections 16 are configured for engagement by a user. Instead, the forceps of Tartaglia, which are constructed of sheet metal, include finger pieces 20, 20', located distal of end section 12, for engagement and manipulation of the forceps.



Accordingly, in view of the foregoing, Appellant respectfully submits that independent claim 31 is not obvious under 35 U.S.C. § 103(a) over Shannon in view of Wood and further in view of Tartaglia. Since claims 32-37, 41, 43 and 44 depend, directly or indirectly, from claim 31, Appellant respectfully submits that claims 32-37, 41, 43 and 44, are also patentable over Shannon in view of Wood.

**B)      Claims 45-50, 52 and 56-59 are patentable under 35 U.S.C. 103(a)  
over Shannon in view of U.S. Patent No. 6,066,174 to Farris and  
further in view of Wood**

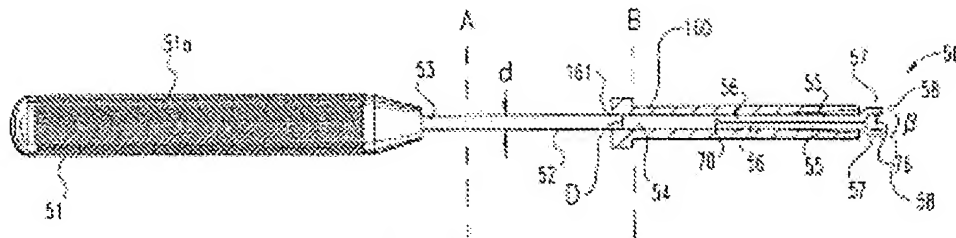
Claims 45-50, 52 and 56-59 stand rejected under 35 U.S.C. 103(a), as being obvious over Shannon in view of U.S. Patent No. 6,066,174 to Farris (hereinafter, "Farris) and further in view of Wood. Appellant respectfully submits that Shannon in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claims 45, 52 and 56.

Claim 45 recites a surgical clip applying apparatus including, *inter alia*, a handle portion and an elongated body portion rotatably mounted to and extending from the handle portion; and claims 52 and 56 recite a surgical clip applier including, *inter alia*, an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

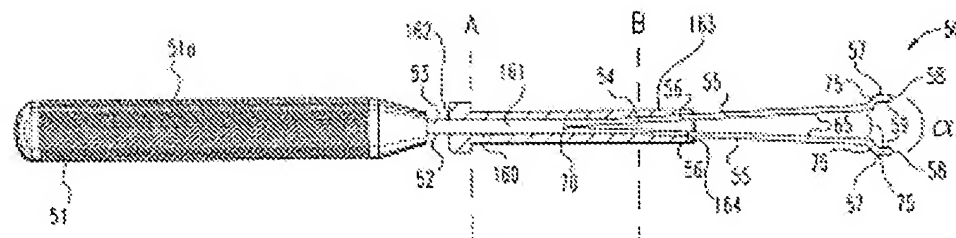
As discussed above, according to the Examiner, Shannon discloses a surgical apparatus substantially as claimed and relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

According to the Examiner, with reference to FIGS. 9 and 10 of Farris reproduced below, Farris discloses an apparatus including a handle portion including a moveable handle (55), a jaw blade (58) and an elongated body portion (160) rotatably mounted to and extending from the

handle portion and including a rotating collar (knurled portion of 160) for rotating the body portion relative to the handle portion.



**Fig. 9**



**Fig. 10**

Instead, with reference to FIG. 2 of Shannon reproduced above, Shannon discloses disposable forceps "F" which are provided with arms 1 which are connected together at inner ends by a connecting section 2. Each arm 1 is provided with a hinge section 3, an inclined section 4, a straight section 5 and article-engaging teeth 6. Ribs are disposed along the outer surfaces of straight sections 5 to provide engaging areas for an operator to normally engage the forceps between the thumb and forefinger of an operator so that the ribbed area between lugs 8 and the junctions between section 4 and 5 define grasping areas for normally grasping the forceps to operate the same.



With reference to FIGS. 9 and 10, reproduced above, Farris discloses an inserter 50 including a handle 51 and a shaft 52. A proximal end 53 of shaft 52 extends from handle 51 and a distal end 54 of shaft 52 includes a pair of jaws 55. A sleeve 160 is slidably mounted on shaft 52 and is slidable between a first position "A" adjacent handle 51 to a second engaging position "B" spaced from first position "A" in a location between first position "A" and free ends 57 of jaws 55. Farris does not disclose that sleeve 160 is rotatably mounted on shaft 52. Further, it is not readily apparent what purpose rotatably mounting sleeve 160 on shaft 52 would serve because jaws 55 are fixedly secured to handle 51 and not to sleeve 160. Therefore, rotation of sleeve 160 would not rotate jaws 55 or an implant held therein, and thus, there is no motivation or suggestion to configure sleeve 160 to be rotatably mounted to shaft 52.

Contrary to the Examiner's assertion, it would not have been obvious to modify inclined section 4 of the forceps of Shannon to include slidable sleeve 160 of Farris. The addition of a sleeve to the forceps of Shannon would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Shannon inoperable for their intended purpose. With reference to FIGS. 3 and 4 of Shannon, reproduced above, actuation of forceps "F" requires engagement of straight sections 5 between the thumb and forefinger of an operator. Modifying either or both of inclined sections 4 and or straight sections 5 of forceps "F" to include sleeve 160 of Farris would prevent engagement of straight sections 5 by a user, thereby preventing the complete engagement of article-engaging teeth 6. Furthermore, the inclusion of a rotatable body portion with forceps "F" would serve no purpose as forceps "F" are monolithically formed and no portion thereof is rotatable relative to another portion thereof.

Accordingly, in view of the foregoing, Appellant respectfully submits that independent claims 45, 52 and 56 are not obvious under 35 U.S.C. § 103(a) over Shannon in view of Farris, and further in view of Wood. Since claims 44-50 depend, directly or indirectly, from claim 45, and claims 57-59 depend, directly or indirectly, from claim 56, Appellant respectfully submits that claims 32-37, 41, 43 and 44, are also patentable over Shannon in view of Wood.

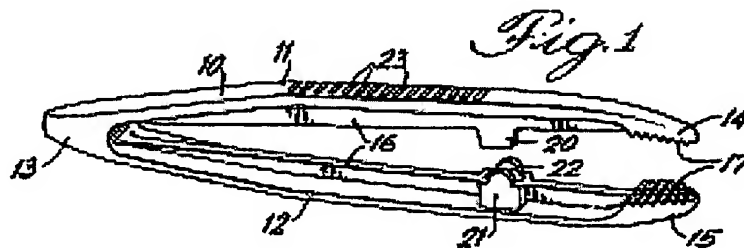
**C)     **Claims 31, 38 and 42 are patentable under 35 U.S.C. 103(a) over U.S. Patent No. 3,140,715 to Whitton, Jr. et al. in view of Wood and further in view of Tartaglia****

Claims 31, 38 and 42 stand rejected under 35 U.S.C. 103(a), as being obvious over U.S. Patent No. 3,140,715 to Whitton, Jr. et al. (hereinafter, "Whitton, Jr.") in view of Wood and further in view of Tartaglia. Appellant respectfully submits that Whitton, Jr. in view of Wood and further in view of Tartaglia fails to disclose each and every element recited in independent claim 31.

Appellant respectfully submits that independent claim 31, as amended herein, is allowable over Whitton, Jr. in view of Wood and further in view of Tartaglia because Whitton, Jr. in view of Wood and further in view of Tartaglia fails to disclose or suggest all the elements of independent claim 31.

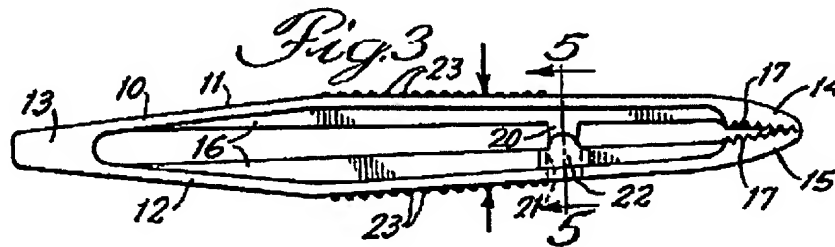
As stated above, independent claim 31 recites a surgical clip applying apparatus including, *inter alia*, a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle.

According to the Examiner, Whitton Jr. discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to FIG. 1, reproduced below, the Examiner states that Whitton, Jr. discloses a surgical apparatus including a handle portion (13 and proximal portions of 11 and 12 combined) including a movable handle (proximal, inclined portions of 11 and 12) and a stationary hand grip (13), an elongated body portion (element 16), a jaw blade including a first leg (distal portion of 11) and a second leg (distal portion of 12), each leg having a jaw (14, 15). The Examiner relies on Wood to teach the modification of the jaw members include a channel oriented substantially along a respective longitudinal axis thereof.



With the above understanding of the apparatus of Whitton, Jr., Whitton, Jr. fails to disclose that “a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle,” as recited in independent claim 31. Instead, forceps 10 of Whitton include a pair of arms 11, 12 that are connected at a proximal end by a connecting portion 13. Opposite ends of arms 11, 12 include jaws 14, 15, respectively. Outer surfaces of arms 11, 12 are provided with transverse ridges 23 so that the instrument may be firmly gripped

and easily manipulated. Contrary to the Examiner's assertion, connecting portion 13 and proximal end of arms 11, 12 do not form a handle portion having a moveable handle and a stationary hand grip, as neither moveable handle nor stationary hand grip are configured for engagement by a user. Furthermore, actuation of the proximal section of arms 11, 12 does not effect the closure of jaws 14, 15. Instead, as seen in FIG. 3, below, closure of jaws 14, 15 occurs upon application of force to a middle portion of arms 11, 12, as indicated by the pair of vertical arrows. Thus, Whitton does not disclose a handle portion including a movable handle and a stationary hand grip, as recited in independent claim 31.



Appellant respectfully submits that Wood fails to cure the deficiencies of Whitton, Jr. in that Wood also fails to show, teach or disclose that "a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle," as recited in independent claim 31. Rather, as noted above, Wood merely discloses or shows a pair of jaws 19 and a clip 25 formable by the pair of jaws 19.

Accordingly, in view of the foregoing, Appellant respectfully submits that independent claim 31 is not obvious under 35 U.S.C. § 103(a) over Whitton in view of Wood. Since claims

38 and 42 depend, directly or indirectly, from claim 31, Appellant respectfully submits that claims 38 and 42, are also patentable over Whitton, Jr. in view of Wood.

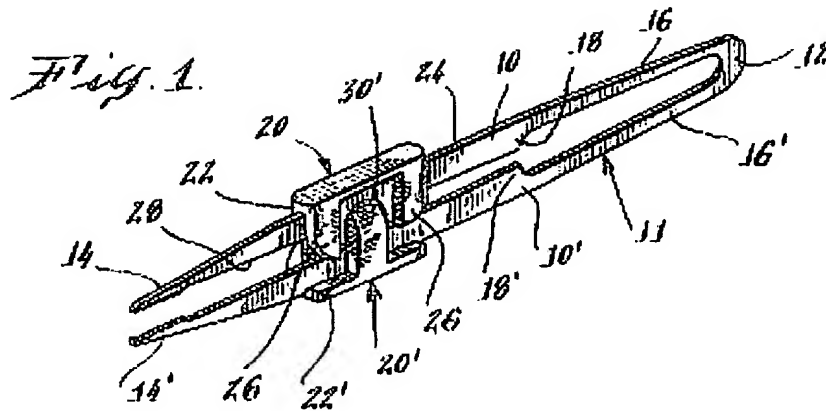
**D)     Claims 31, 33, 39 and 40 are patentable under 35 U.S.C. § 103(a) over  
       U.S. Patent No. 4,318,313 to Tartaglia in view of Wood**

Claims 31, 33, 39 and 40 stand rejected under 35 U.S.C. § 103(a), as being obvious over U.S. Patent No. 4,318,313 to Tartaglia (hereinafter, "Tartaglia") in view of Wood. Appellant respectfully submits that independent claim 31, as amended herein, is allowable over Tartaglia in view of Wood because Tartaglia in view of Wood fails to disclose or suggest all the elements of independent claim 31.

As stated above, independent claim 31 recites a surgical clip applying apparatus including, *inter alia*, a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle, the jaw blade including a first leg and a second leg, each leg having a jaw integrally connected thereto and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween, wherein each jaw is oriented at an angle with respect to a plane defined by the first and second leg.

Appellant respectfully submits that independent claim 31, as amended herein is allowable over Tartaglia in view of Wood because Tartaglia in view of Wood fails to disclose or suggest all the elements of independent claim 31.

According to the Examiner, Tartaglia discloses the invention substantially as claimed, except for the jaws defining a channel oriented substantially along a respective longitudinal axis thereof. Specifically, with reference to FIG. 1, reproduced below, the Examiner states that Tartaglia discloses a surgical apparatus including a handle portion (12) including a movable handle (14 or 16) and a stationary hand grip (at 18), an elongated body portion (42, 42'), a jaw blade (28 and 20) including a first leg (28) and a second leg (30), each leg having a jaw (34 or 34'). The Examiner relies on Wood to teach the modification of the jaw members to include a channel oriented substantially along a respective longitudinal axis thereof.



With the above understanding of the apparatus of Tartaglia, Tartaglia fails to disclose a handle portion including a moveable handle and a stationary hand grip, an elongated body portion extending from the handle portion, and a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle. Instead, as discussed above, forceps of Tartaglia include a pair of elongated arms 10, 10' connected by an end section 12 and forming an elongated U-shaped tweezer-like spring element 11. Free ends or tips 14, 14' include teeth for securely grasping an

object when arms 10, 10' are flexed toward each other to engage tips 14, 14'. To facilitate manipulation, forceps of Tartaglia include finger pieces 20, 20' mounted on mid-portions 18, 18' of arms 10, 10'. Contrary to the Examiner's assertion, neither end section 12 nor either of tips 14, 14' or sections 16, 16' of arms 10, 10', respectively, form a handle portion having a moveable handle and a stationary hand grip, as neither end section 12, tips 14 or sections 16 are configured for engagement by a user. Instead, the forceps of Tartaglia, which are constructed of sheet metal, include finger pieces 20, 20', located distal of end section 12, for engagement and manipulation of the forceps.

Tartaglia further fails to disclose a first leg and a second leg, each leg having a jaw integrally connected thereto and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween, wherein each jaw is oriented at an angle with respect to a plane defined by the first and second leg," as recited in independent claim 31. Instead, jaws 14 and 14' are disposed in the same plane and the plane defined by legs (10, 10').

Appellant respectfully submits that Wood fails to cure the deficiencies of Tartaglia in that Wood also fails to show, teach or disclose each jaw being oriented at an angle with respect to a plane defined by the first and second leg, as recited in independent claim 31. Rather, Wood merely discloses or shows a pair of jaws 19 and a clip 25 formable by the pair of jaws 19.

Accordingly, in view of the foregoing, Appellant respectfully submits that independent claim 31 is not patentable under 35 U.S.C. § 103(a) over Tartaglia in view of Wood. Since

claims 38 and 42 depend, directly or indirectly, from claim 31, Appellant respectfully submits that claims 38 and 42, are also patentable over Tartaglia in view of Wood.

**E)      Claims 45, 47, 51, 56, 57 and 60 are patentable under 35 U.S.C. 103(a) over Whitton, Jr. in view of Farris, and further in view of Wood**

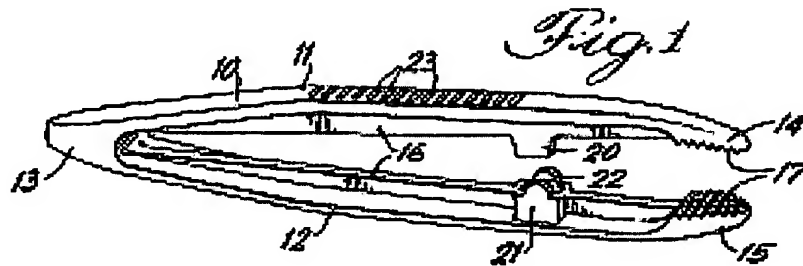
Claims 45, 47, 51, 56, 57 and 60 stand rejected under 35 U.S.C. 103(a), as being unpatentable over Whitton, Jr. in view of Farris, and further in view of Wood. Appellant respectfully submits that Whitton, Jr. in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claims 45 and 56.

Claim 45 recites a surgical clip applying apparatus including, *inter alia*, a handle portion and an elongated body portion rotatably mounted to and extending from the handle portion; and claim 56 recites a surgical clip applier including, *inter alia*, an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

As discussed above, according to the Examiner, Whitton, Jr. discloses a surgical apparatus substantially as claimed. As previously noted, the Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

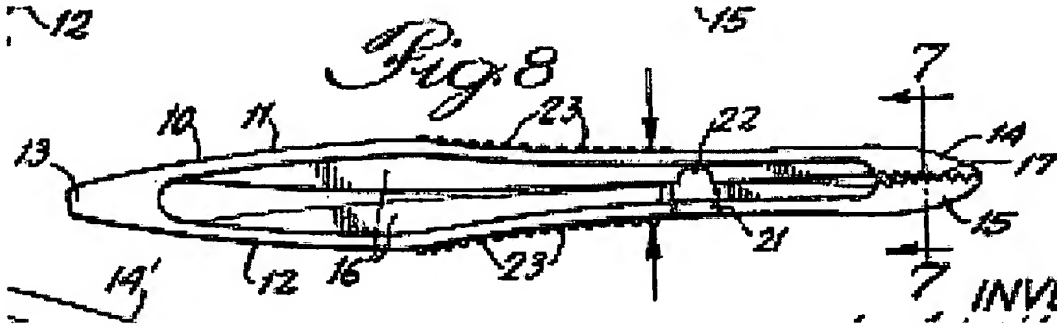


Instead, with reference to FIG. 1 of Whitton, Jr. reproduced below, Whitton Jr. discloses forceps 10 which include upper and lower arms 11 and 12. A pair of corresponding ends of the arms are secured together by a connecting portion 13 and the opposite ends of the arms are provided with jaws 14, 15. When the tips of the jaws come into contact, the remaining portions of those jaws, as well as the longitudinal ribs 16 of arms 11 and 12, are still spaced a substantial distance apart. It is only upon the application of increased force sufficient to cause a bending of the reinforcing ribs 16 that the ribs of the respective jaws are urged into contact and the teeth of the upper and lower jaws fully mesh.



Contrary to the Examiner's assertion, it would not have been obvious to modify the elongated portion of the forceps of Whitton, Jr. to include slidable sleeve 160 of Farris. A person of ordinary skill in the art of plastic forceps would not look to a device for inserting vertebral implants, therefore the references are not properly combined. Assuming *arguendo*, the combination of Whitton, Jr. and Farris is proper the addition of a sleeve to the forceps of Whitton, Jr. would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Whitton, Jr. inoperable for their intended purpose. As discussed above, and with reference to FIG. 8 of Whitton, Jr., reproduced below, it is only upon the application of increased force sufficient to

cause a bending of the reinforcing ribs 16 that the ribs of respective arms 11, 12 are urged into contact and teeth 17 of upper and lower jaws 14, 15 fully mesh. Modifying arms 11, 12 of forceps 10 to include sleeve 160 of Farris would prevent proper engagement of arms 11, 12 by a user, thereby preventing the complete engagement of teeth 17. Furthermore, the inclusion of a rotatable body portion with forceps 10 would serve no purpose as forceps 10 are monolithically formed and no portion thereof is rotatable relative to any other portion thereof.



Accordingly, in view of the foregoing, Appellant respectfully submits that independent claims 45 and 56 are not obvious under 35 U.S.C. § 103(a) over Whitton, Jr. in view of Farris, and further in view of Wood. Since claims 47 and 51 depend, directly or indirectly, from claim 45, and claims 57 and 60 depend, directly or indirectly, from claim 56, Appellant respectfully submits that claims 47, 51, 57 and 60, are also patentable over Whitton, Jr. in view of Wood.

**F)      Claims 52-54 are patentable under 35 U.S.C. § 103(a) over Tartaglia in view of Farris and further in view of Wood**

Claims 52-54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tartaglia in view of Farris and further in view of Wood. Appellant respectfully submits that Tartaglia in view of Farris and further in view of Wood fails to disclose each and every element recited in independent claim 52.

Claim 52 recites an apparatus for applying surgical fasteners or clips including, *inter alia*, a body portion extending from a handle portion and including a rotating collar for rotating the body portion relative to the handle portion.

As discussed above, according to the Examiner, Tartaglia discloses a surgical apparatus substantially as claimed. As previously noted, the Examiner relies on Wood to teach the modification of the jaw member to include a channel oriented substantially along a respective longitudinal axis thereof. Additionally, the Examiner relies on Farris to teach an elongated body portion rotatably mounted to and extending from the handle portion and an elongated body portion extending from the handle portion and including a rotation collar for rotating the body portion relative to the handle portion.

Instead, with reference to FIG. 1 of Tartaglia reproduced hereinbelow, Tartaglia discloses a forceps including a pair of elongated arms 10, 10' integral with an end section 12. Arms 10, 10' and their integral end section 12 form an elongated U-shaped tweezer-like spring element 11. In order to facilitate manipulation of the forceps, finger pieces 20, 20' are mounted on the mid-portions 18, 18' of arms 10, 10' at a suitable distance rearward of their tips 14, 14'.

Contrary to the Examiner's assertion, it would not have been obvious to modify the elongated portion of the forceps of Tartaglia to include slidable sleeve 160 of Farris. The addition of a sleeve to the tweezer forceps of Tartaglia would not allow the forceps to be used in a minimally-invasive procedure, as proffered by the Examiner. Instead, the modification would render the forceps of Tartaglia inoperable for their intended purpose. Modifying arms 10, 10' of forceps to include sleeve 160 of Farris would prevent proper engagement of finger pieces 20, 20' by a user, thereby preventing engagement of the jaw members. Furthermore, the inclusion of a rotatable body portion within the tweezer forceps serves no practical purpose as no portion of the tweezer forceps is rotatable relative to any other portion thereof.

Accordingly, in view of the foregoing, Appellant respectfully submits that claim 52 is not obvious under 35 U.S.C. § 103(a) over Tartaglia in view of Farris and further in view of Wood. Since claims 53-54 depend, directly or indirectly, from claim 52, Appellant respectfully submits that claims 53-54, are also patentable over Tartaglia in view of Farris and further in view of Wood.

**G)     Claim 55 is patentable under 35 U.S.C. § 103(a) over Wood in view of Shannon and further in view of Farris**

Claim 55 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood in view of Shannon and further in view of Farris. Appellant respectfully submits that independent claim 55 is allowable over Wood in view of Shannon and further in view of Farris because Wood in view of Shannon and Farris fails to disclose or suggest all the elements of independent claim 55.

Independent claim 55 recites a method for applying surgical clips and performing blunt dissection of tissue including, *inter alia*, the step of providing a surgical clip applier for applying surgical clips, which surgical clip applier includes a handle portion including a moveable handle, an elongated body portion rotatable mounted to and extending from the handle portion, and a jaw blade supported on a distal end of the elongated body and being selectively closed upon an actuation of the moveable handle.

As discussed above, none of Wood, Shannon or Farris, individually or in any proper combination, show, teach or disclose a clip applier including, *inter alia*, an elongated body portion rotatably mounted to and extending from the handle portion. Accordingly, in view of the foregoing, Appellant respectfully submits that claim 55 is not obvious under 35 U.S.C. § 103(a) over Wood in view of Shannon and further in view of Farris.

**H)     Claims 61, 62 and 64 are patentable under 35 U.S.C. § 103(a) over Shannon in view of Farris and Wood, and further in view of U.S. Patent No. 6,319,257 to Carignan et al.**

Claims 61, 62 and 64 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shannon in view of Farris and Wood, and further in view of U.S. Patent No. 6,319,257 to Carignan et al. ("Carignan"). Appellant respectfully submits that claims 61, 62 and 64 are allowable over Shannon in view of Farris and Wood, and further in view of Carignan.

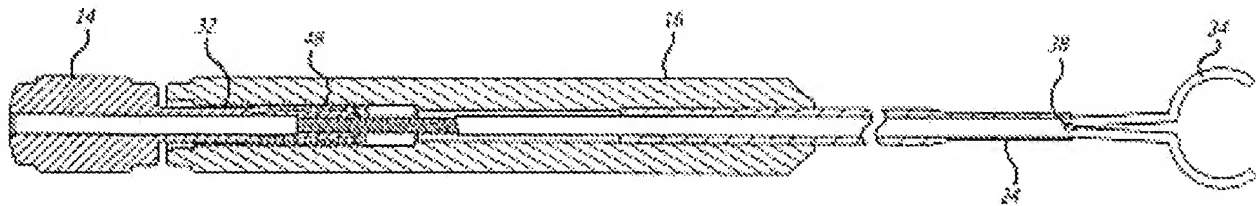
The Examiner relies on Carignan to disclose rotation of an elongated body relative to a handle portion to cause rotation of the jaw blade.

According to the Examiner, Carignan teaches an apparatus where rotation of an elongated body (16) relative to a handle portion (46) causes rotation of jaw blades (34), and it would have

been obvious to modify the elongated body and handle portion of Shannon in view of Farris and Wood, so that rotation of the elongated body relative to the handle portion causes rotation of the jaw blades.

Instead, with reference to FIG. 9 below, Carignan discloses an inserter device assembly 12 including a knob 14, a sleeve 16 and a shaft 18. Sleeve 16 includes a handle region 20, a tubular region 22, and a tip region 24. A free end of handle 20 associated with knob 14 at an inner thread 32 along opening 28 of handle 20. Shaft 18 includes jaws 34 on one end and a threaded end 36 on the opposite end. In operation, as knob 14 is turned in a certain direction, i.e., clockwise, an outer thread 48 and inner thread 32 are threaded to cause knob 14 to extend relative to sleeve 16. At the same time, the center thread 50 and a threaded end 36 are threaded to cause the threaded end 36 to retract into internal thread 50. The net result is that fork 40 is retracted into the tip region 24 at a faster rate because as threaded end 36 is retracted into internal thread 50, knob 14 is also being extended relative to sleeve 16.

FIG. 9



As discussed above, none of Shannon, Farris or Wood, individually or in any proper combination, show, teach or disclose a clip applier including, *inter alia*, an elongated body

portion rotatably mounted to and extending from the handle portion, as recited in claim 45, or a body portion extending from the handle portion and including a rotating collar for rotating the body portion relative to the handle portion, as recited in claims 52 and 56. Appellant respectfully submits that Carignan fails to cure the deficiencies of Shannon, Farris and Wood with respect to claims 45, 52 and 56.

Since claim 61 depends from claim 45, claim 62 depends from claim 52 and claim 64 depends from claim 56, and each includes all of the features of the base claim, for at least the same reasons claims 61, 62 and 64 are not obvious under 35 U.S.C. § 103(a) over Shannon in view of Farris and Wood, and further in view of U.S. Patent No. 6,319,257 to Carignan.

Furthermore, contrary to the Examiner's assertion, Carignan fails to disclose rotation of an elongated body relative to the handle portion causes rotation of the jaw blades. As discussed above, rotation of knob 14 cause extension of knob 14 relative to sleeve 16 and retraction of fork 40 relative to sleeve 16. Thus, rotation of sleeve 16 relative to handle 14 effects open and closing of jaws 34, not, as the Examiner contends, rotation of jaws 34.

**I) Claim 63 is patentable under 35 U.S.C. § 103(a) over Wood in view of Shannon and Farris, and further in view of Carignan**

Claim 63 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood in view of Shannon and Farris, and further in view of Carignan.

As discussed above, none of Shannon, Farris or Wood, individually or in any proper combination, show, teach or disclose a clip applier including, *inter alia*, an elongated body portion rotatably mounted to and extending from the handle portion, as recited in claim 55.

Appellant respectfully submits that Carignan fails to cure the deficiencies of Shannon, Farris and Wood with respect to claim 55. Since claim 62 depends from claim 55, and each includes all of the features of the base claim, for at least the same reasons claims 63 is not obvious under 35 U.S.C. § 103(a) over Wood in view of Shannon and Farris, and further in view of Carignan.

### **VIII. CONCLUSION**

In view of the foregoing remarks, Appellants respectfully submit that all of the claims now pending in this application, namely, Claims 31-64 are in condition for allowance. Early and favorable reconsideration of this application is respectfully requested.

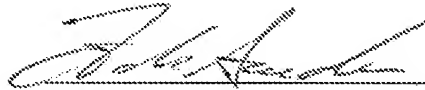
Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. §1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 21-0550. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 21-0550 therefore.



Appl. No. 10/510,165  
Brief on Appeal dated June 3, 2010  
Reply to Final Office Action mailed December 31, 2009

An early and favorable response on the merits is earnestly requested.

Respectfully submitted,



Francesco Sardone  
Reg. No.: 47,918  
Attorney for Appellants

***Carter, DeLuca, Farrell & Schmidt LLP***  
445 Broad Hollow Road – Suite 420  
Melville, New York 11747  
Tel.: (631) 501-5700  
Fax: (631) 501-3526

FS:jy

**IX. CLAIMS APPENDIX**

Claims 1-30. (Canceled)

31. (Rejected) A surgical clip applying apparatus, comprising:

a handle portion including a moveable handle and a stationary hand grip;

an elongated body portion extending from the handle portion; and

a jaw blade extending from said elongated body portion and operably connected to the handle portion for selective closure upon an actuation of the moveable handle, the jaw blade comprising:

a first leg and a second leg, each leg having a jaw integrally connected thereto and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween, wherein each jaw is oriented at an angle with respect to a plane defined by the first and second leg; and

an inter-leg engaging member extending from each of the first and second legs and including a distal end engageable with the other of the first and second legs, wherein the distal end of each inter-leg engaging member is at all times at least partially engaged with the other of the first and second legs.

32. (Rejected) The apparatus of claim 31, wherein when the at least one inter-leg engaging member is engaged with the other of the first and second legs, a vertical displacement in a first direction of one of the first and second legs causes a first corresponding displacement in

the first direction of the other of the first and second legs, and such that a vertical displacement in a second direction, opposite the first direction, of the one of the first and second legs causes a second corresponding displacement in the second direction of the other of the first and second legs.

33. (Rejected) The apparatus of claim 31, wherein the jaw blade includes two inter-leg engaging members, a first inter-leg engaging member that extends from the first leg and is engageable with the second leg, and a second inter-leg engaging member that extends from the second leg and is engageable with the first leg.

34. (Rejected) The apparatus of claim 33, wherein when the respective first and second inter-leg engaging members are engaged with the respective second and first legs, a vertical displacement in a first direction of one of the first and second legs causes a first corresponding displacement in the first direction of the other of the first and second legs, and such that a vertical displacement in a second direction, opposite the first direction, of the one of the first and second legs causes a second corresponding displacement in the second direction of the other of the first and second legs.

35. (Rejected) The apparatus of claim 33, wherein the first inter-leg engaging member comprises a first arm configured and adapted to engage the second leg, and the second inter-leg engaging member comprises a second arm configured and adapted to engage the first leg.

36. (Rejected) The apparatus of claim 31, wherein the first leg includes an inner surface oriented toward the second leg and a recess formed in an upper portion of the inner surface of the first leg, and the second leg includes an inner surface oriented toward the first leg and a recess formed in an upper portion of the inner surface of the second leg, the inner surface of the first leg having a first inter-leg engaging member comprised of a first arm that includes a tongue extending distally therefrom, the tongue of the first arm being configured and dimensioned to be received in and being engageable with the recess in the upper portion of the second leg, and the inner surface of the second leg having a second inter-leg engaging member comprised of a second arm that includes a tongue extending distally therefrom, the tongue extending from the second arm being configured and dimensioned to be received in and being engageable with the recess in the upper portion of the first leg.

37. (Rejected) The apparatus of claim 31, wherein there are two inter-leg engaging members, a first inter-leg engaging member comprising a first arm that extends from the first leg and closely overlies and is engageable with the second leg, and a second inter-leg engaging member comprising a second arm that extends from the first leg and closely underlies and is engageable with the second leg.

38. (Rejected) The apparatus of claim 31, wherein the first leg includes a first arm that extends from the first leg toward the second leg, the first arm including a pair of transversely spaced apart tongues extending distally therefrom, the second leg including an upper and lower surface, an upper recess in the upper surface thereof, and a lower recess in the lower surface

thereof, wherein the pair of spaced apart tongues of the first arm are configured and dimensioned to be received in and be engageable with the upper and lower recesses formed respectively in the upper and lower surfaces of the second leg.

39. (Rejected) The apparatus of claim 31, wherein when the jaws of the jaw blade are in an open position, a portion of the inter-leg engaging member that extends from one of the first and second legs, closely overlies a portion of the other of the first and second legs.

40. (Rejected) The apparatus of claim 33, wherein when the jaws of the jaw blade are in an open position, a portion of the inter-leg engaging member that extends from one of the first and second legs, slidably engages a portion of the other of the first and second legs.

41. (Rejected) The apparatus of claim 36, wherein a portion of the tongue of the first arm closely overlies the recess in the second upper surface of the second leg, and a portion of the tongue of the second arm closely underlies the recess in the first lower surface of the first leg.

42. (Rejected) The apparatus of claim 38, wherein the pair of spaced apart tongues of the first arm closely overlie and underlie the respective upper and lower recesses of the second leg.

43. (Rejected) The apparatus of claim 31, wherein each of the first and second legs includes a neck adjacent the jaw of the respective first and second legs, and the inter-leg engaging member extends from one of the necks.

44. (Rejected) The apparatus of claim 43, wherein there are two inter-leg engaging members, one that extends from the neck of the first leg, and another that extends from the neck of the second leg.

45. (Rejected) A surgical clip applying apparatus, comprising:  
a handle portion including a moveable handle;  
an elongated body portion rotatably mounted to and extending from the handle portion;  
and

jaw blade for use in a surgical clip applier, wherein the jaw blade is selectively closed upon an actuation of the moveable handle, the jaw blade comprising:

a first leg and a second leg, each leg having a jaw integrally connected thereto, and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therefrom; and

at least one inter-leg engaging member extending from one of the first and second legs, and extending between and engaged with the other of the first and second legs.

46. (Rejected) The apparatus of claim 45, wherein when the at least one inter-leg engaging member is slidably engaged with the other of the first and second legs, such that a vertical displacement in a first direction of one of the first and second legs causes a first corresponding displacement in the first direction of the other of the first and second legs, and such that a vertical displacement in a second direction, opposite the first direction, of the one of the first and second legs causes a second corresponding displacement in the second direction of the other of the first and second legs.

47. (Rejected) The apparatus of claim 45, wherein the first leg includes a first neck portion and the second leg includes a second neck portion, the first and second neck portions adjoining the first and second jaws, and the at least one inter-leg engaging member including:

a first arm that extends from the first neck portion and slidably engages the second neck portion; and

a second arm, spaced from the first arm, that extends from the second neck portion and slidably engages the first neck portion.

48. (Rejected) The apparatus according to claim 47, wherein the first neck portion includes a first inner surface oriented toward the second neck portion and a recess formed in a lower portion of the first inner surface, and the second neck portion includes a second inner surface oriented toward the first neck portion and a recess formed in a lower portion of the second inner surface;

wherein the first arm extending from the first inner surface of the first neck portion includes a tongue extending distally therefrom, the tongue extending from the first arm being configured and adapted to be received in the recess formed in the lower portion of the second neck portion; and

wherein the second arm extending from the second inner surface of the second neck portion includes a tongue extending distally therefrom, the tongue extending from the second arm being configured and adapted to be received in the recess formed in the lower portion of the first neck portion, wherein at least one of the first and second tongues is slidingly engaged with its respective recess.

49. (Rejected) The apparatus according to claim 47, wherein the at least one inter-leg engaging member comprises:

a first arm configured and adapted to extend from the first neck portion and overlies and slidingly engage the second neck portion; and

a second arm configured and adapted to extend from the first neck portion and underlies and slidingly engage the second neck portion.

50. (Rejected) The apparatus according to claim 47, wherein the at least one inter-leg engaging member comprises:

a first arm configured and adapted to extend from the first neck portion and overlies and slidingly engage the second neck portion; and



a second arm configured and adapted to extend from the second neck portion and overlies and slidably engage the first neck portion.

51. (Rejected) The apparatus according to claim 47, wherein the jaw blade defines a longitudinal axis, and wherein the first neck portion includes an arm extending therefrom and substantially toward the second neck portion, the arm including a pair of spaced apart tongues extending at an angle to the longitudinal axis of the jaw blade, wherein the second neck portion includes a recess formed in each of the upper and lower surface thereof, and wherein the pair of spaced apart tongues of the arm respectively slidably engage the recesses formed in the upper and lower surfaces of the second neck portion.

52. (Rejected) An apparatus for applying surgical fasteners or clips, the apparatus comprising:

a handle portion including a moveable handle,

a body portion extending from the handle portion and including a rotating collar for rotating the body portion relative to the handle portion, and

a jaw blade extending from the body portion at an end opposite the handle portion and being selectively closed upon an actuation of the moveable handle, the jaw blade having a first leg and a second leg, each leg having a jaw integrally connected thereto, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a fastener or clip, the jaw blade being movable between an open

position for receiving the fastener or clip and a closed position for forming the fastener or clip in response to a movement of the handle portion; and

a fastener or clip supply disposed within the body portion,

wherein the jaw blade further includes at least one inter-leg engaging member extending between and being adapted to effect an engagement between the first and second legs, wherein vertical displacement in a first direction of one of the first and second legs causes a corresponding displacement in the first direction of the other of the first and second legs, and wherein a vertical displacement in a second direction, opposite the first direction, of one of the first and second legs causes a second corresponding displacement in the second direction of the other of the first and second legs, wherein the jaws are configured to form a surgical clip disposed therebetween.

53. (Rejected) The apparatus of claim 52, wherein the at least one inter-leg engaging member is adapted to effect engagement when the jaws are in an open position.

54. (Rejected) The apparatus of claim 52, wherein the at least one inter-leg engaging member is adapted to effect engagement when the jaws are in a closed position.

55. (Rejected) A method for applying surgical clips and performing blunt dissection of tissue, comprising the steps of:

providing a surgical clip applier for applying surgical clips, which surgical clip applier includes:

a handle portion including a moveable handle;

an elongated body portion rotatably mounted to and extending from the handle portion; and

a jaw blade supported on a distal end of the elongated body and being selectively closed upon an actuation of the moveable handle, the jaw blade having:

a first leg and a second leg, each of the first and second legs having a jaw integrally connected thereto and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive the surgical clip therebetween; and

at least one inter-leg engaging member extending between and effecting an engagement between the first and second legs, such that a vertical displacement in a first direction of one of the first and second legs causes a first corresponding displacement in the first direction of the other of the first and second legs, and such that a vertical displacement in a second direction, opposite the first direction, of one of the first and second legs causes a second corresponding displacement in the second direction of the other of the first and second legs; and

performing a blunt dissection technique utilizing the jaws of the clip applier; and

applying a surgical clip to a tissue or vascular target area utilizing the clip applier.

56. (Rejected) A surgical clip applier, comprising:

a handle portion including a movable handle;

an elongated body portion extending from the handle portion and including a rotating collar for rotating the body portion relative to the handle portion; and

a jaw blade supported on a distal end of the elongated body and being selectively closed upon an actuation of the moveable handle, the jaw blade comprising:

a first leg;

a second leg spaced from and parallel to the first leg, the first and second legs defining a plane, each leg including a jaw integrally formed at a distal end thereof and extending distally therefrom, each jaw defining a channel oriented substantially along a respective longitudinal axis thereof, wherein the channels are configured to receive a surgical clip therebetween; and

at least one inter-leg engaging member extending between the first and the second legs and operatively engaged therewith, wherein the at least one inter-leg engaging member maintains or reduces the loss of co-planarity of the first leg with respect to the second leg.

57. (Rejected) The apparatus according to claim 56, wherein the operative engagement of the at least one inter-leg engaging member causes the first and second leg members to deflect and maintain their co-planarity when one of the first and second legs is deflected in a direction which is orthogonal with respect to the plane defined by the first and second legs.

58. (Rejected) The apparatus according to claim 57, wherein the jaw blade includes:

a first inter-leg engaging member integrally formed with the first leg and extending substantially toward the second leg, the first inter-leg engaging member including a tongue extending from a distal end thereof, which tongue is configured and dimensioned to interengage a recess formed in a surface of the second leg; and

a second inter-leg engaging member integrally formed with the second leg and extending substantially toward the first leg, the second leg inter-engaging member including a tongue extending from a distal end thereof, which tongue is configured and dimensioned to interengage a recess formed in a surface of the first leg.

59. (Rejected) The apparatus according to claim 58, wherein the recess formed in the second leg is formed in one of a top and a bottom surface thereof, and wherein the recess formed in the first leg is formed in one of a top and a bottom surface thereof, which recess formed in the first leg is formed in the surface opposite the top and bottom surface in which the recess of the second leg is formed.

60. (Rejected) The apparatus according to claim 57, wherein the at least one inter-leg engaging member includes a single inter-leg engaging member integrally formed with one of the first and second legs and extending substantially toward the other of the first and second legs, the inter-leg engaging member including a pair of tongues extending from a distal end of the inter-leg engaging member and spaced from one another in a direction orthogonal to the plane defined by the first and second legs, each tongue of the pair of tongues being configured and dimensioned to interengage a respective recess formed in a top surface and a bottom surface of the second leg.

61. (Rejected) The apparatus according to claim 45, wherein rotation of the elongated body relative to the handle portion causes rotation of the jaw blade.

62. (Rejected) The apparatus according to claim 52, wherein rotation of the elongated body relative to the handle portion causes rotation of the jaw blade.

63. (Rejected) The apparatus according to claim 55, wherein rotation of the elongated body relative to the handle portion causes rotation of the jaw blade.

64. (Rejected) The apparatus according to claim 56, wherein rotation of the elongated body relative to the handle portion causes rotation of the jaw blade.

## **X. EVIDENCE APPENDIX**

None

Appl. No. 10/510,165  
Brief on Appeal dated June 3, 2010  
Reply to Final Office Action mailed December 31, 2009

**XI. RELATED PROCEEDINGS APPENDIX**

None